

Appl. No. 10/797,791
Amendment and/or Response
Reply to Office action of 14 March 2006

Page 2 of 14

Listing of the Claims:

A clean version of the entire set of pending claims is submitted herewith per 37 CFR 1.121(c)(3). This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-4. (Canceled)

5. (Previously Presented) A resonant converter comprising:
a transformer with a primary winding and at least two secondary windings of different winding directions;
a capacitive element in series with the primary winding;
at least one external inductive element in series with the capacitive element and the primary winding; and
multiple outputs coupled to the secondary windings of the transformer;
wherein the resonant frequency of the resonant converter is determined by the main inductance and the leakage inductances of the transformer, the capacitive element, and the external inductive element.

Claims 6-8. (Canceled)

9. (Previously Presented) A resonant converter comprising:
multiple outputs; and
a transformer with a primary winding and at least two secondary windings of different winding directions,
wherein different ratios of output voltage to number of turns are provided in respect of associated secondary windings having different winding directions.

Claim 10. (Canceled)

Atty. Docket No. DE-010138A

Appl. No. 10/797,791
Amendment and/or Response
Reply to Office action of 14 March 2006

Page 3 of 14

11. (Previously Presented) The resonant converter of claim 5, further including:
an inverter coupled to the primary winding of the transformer; and
means for deriving from each of the multiple outputs a measuring signal for regulating an output voltage of the inverter.

12. (Previously Presented) The resonant converter of claim 11, wherein the transformer has a first group of secondary windings with one or more secondary windings having a first winding direction and a second group of secondary windings with one or more secondary windings having a second winding direction, at least two of the secondary windings being electrically separated from one another.

13. (Previously Presented) The resonant converter of claim 5, wherein the transformer has a first group of secondary windings with one or more secondary windings having a first winding direction and a second group of secondary windings with one or more secondary windings having a second winding direction, at least two of the secondary windings being electrically separated from one another.

Claim 14. (Canceled)

15. (Previously Presented) A resonant converter, comprising:
multiple outputs; and
a transformer with a primary winding and at least two secondary windings of different winding directions,

wherein the secondary windings of the transformer are connected to the converter outputs by way of one diode and one output filter each, and

wherein the transformer has a first group of secondary windings with one or more secondary windings having a first winding direction and a second group of secondary windings with one or more secondary windings having a second winding

Atty. Docket No. DE-010138A

Appl. No. 10/797,791
Amendment and/or Response
Reply to Office action of 14 March 2006

Page 4 of 14

direction, at least two of the secondary windings being electrically separated from one another.

16. (Previously Presented) The resonant converter of claim 9, wherein the transformer has a first group of secondary windings with one or more secondary windings having a first winding direction and a second group of secondary windings with one or more secondary windings having a second winding direction, at least two of the secondary windings being electrically separated from one another.

17. (Previously Presented) The resonant converter of claim 5, wherein the transformer has a first group of secondary windings with one or more secondary windings having a first winding direction and a second group of secondary windings with one or more secondary windings having a second winding direction, at least two of the secondary windings being electrically connected to one another.

18. (Previously Presented) The resonant converter of claim 17, wherein the secondary windings are connected to a ground potential.

Claims 19-22. (Canceled)

23. (Previously Presented) The resonant converter of claim 9, wherein the transformer has a first group of secondary windings with one or more secondary windings having a first winding direction and a second group of secondary windings with one or more secondary windings having a second winding direction, at least two of the secondary windings being electrically connected to one another.

24. (Previously Presented) The resonant converter of claim 23, wherein the secondary windings are connected to a ground potential.

Atty. Docket No. DE-010138A

Appl. No. 10/797,791
Amendment and/or Response
Reply to Office action of 14 March 2006

Page 5 of 14

25. (Previously Presented) The resonant converter of claim 11, wherein the transformer has a first group of secondary windings with one or more secondary windings having a first winding direction and a second group of secondary windings with one or more secondary windings having a second winding direction, at least two of the secondary windings being electrically connected to one another.

26. (Previously Presented) The resonant converter of claim 25, wherein the secondary windings are connected to a ground potential.

27. (Previously Presented) The resonant converter of claim 5, further comprising:

a regulating circuit for deriving from each of the multiple outputs a measuring signal for regulating an output voltage of the inverter; and

an inverter coupled to an output of the regulating circuit and in response thereto generating a chopped DC voltage signal to be coupled to the primary winding of the transformer,

wherein the regulating circuit provides a signal to the inverter to set a frequency and a duty cycle of the chopped DC voltage signal.

28. (Previously Presented) The resonant converter of claim 9, further comprising a regulating circuit for deriving from each of the multiple outputs a measuring signal for regulating an output voltage of the inverter.

29. (Previously Presented) The resonant converter of claim 28, further comprising an inverter coupled to an output of the regulating circuit and in response thereto generating a chopped DC voltage signal to be coupled to the primary winding of the transformer.

Atty. Docket No. DE-010138A

**Appl. No. 10/797,791
Amendment and/or Response
Reply to Office action of 14 March 2006**

Page 6 of 14

30. (Previously Presented) The resonant converter of claim 29, wherein the regulating circuit provides a signal to the inverter to set a frequency and a duty cycle of the chopped DC voltage signal.

31. (Previously Presented) The resonant converter of claim 15, further comprising a regulating circuit for deriving from each of the multiple outputs a measuring signal for regulating an output voltage of the inverter.

32. (Previously Presented) The resonant converter of claim 31, further comprising an inverter coupled to an output of the regulating circuit and in response thereto generating a chopped DC voltage signal to be coupled to the primary winding of the transformer.

33. (Previously Presented) The resonant converter of claim 32, wherein the regulating circuit provides a signal to the inverter to set a frequency and a duty cycle of the chopped DC voltage signal.

Atty. Docket No. DE-010138A